

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

A cross-sectional view of a semiconductor device. The structure consists of several layers. At the bottom is a substrate (1). Above it is a layer (2) with a patterned top surface. Layer (3) is a thick, uniform layer. Layer (4) is a thin, uniform layer. Layer (5) is a thin, uniform layer. Layer (6) is a thin, uniform layer. Layer (7) is a thin, uniform layer. Layer (8) is a thin, uniform layer. Layer (9) is a thin, uniform layer. Layer (10) is a thin, uniform layer. Layer (11) is a thin, uniform layer. Layer (12) is a thin, uniform layer. Layer (13) is a thin, uniform layer. The top surface of the device features a series of rectangular openings or windows, each filled with a material (10) that has a hatched pattern. The openings are separated by a material (8) that also has a hatched pattern. The entire structure is covered by a top layer (13) that has a hatched pattern.

Figure 1B is a cross-sectional view of a multi-layered structure. It shows a series of layers and components labeled with numbers 1 through 14. The structure is composed of several horizontal layers, some of which are hatched to indicate different materials. A central component, labeled 14, is shown in a cross-section with a concave top surface. Other components are labeled 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13, indicating various parts of the assembly.

FIG. 2

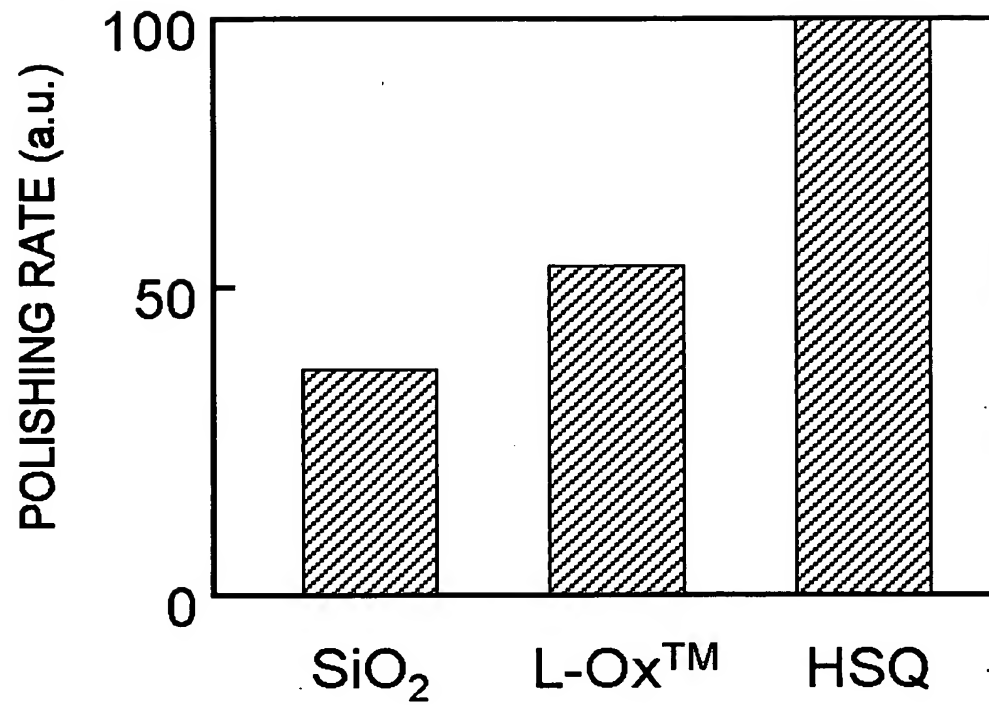


FIG. 3A

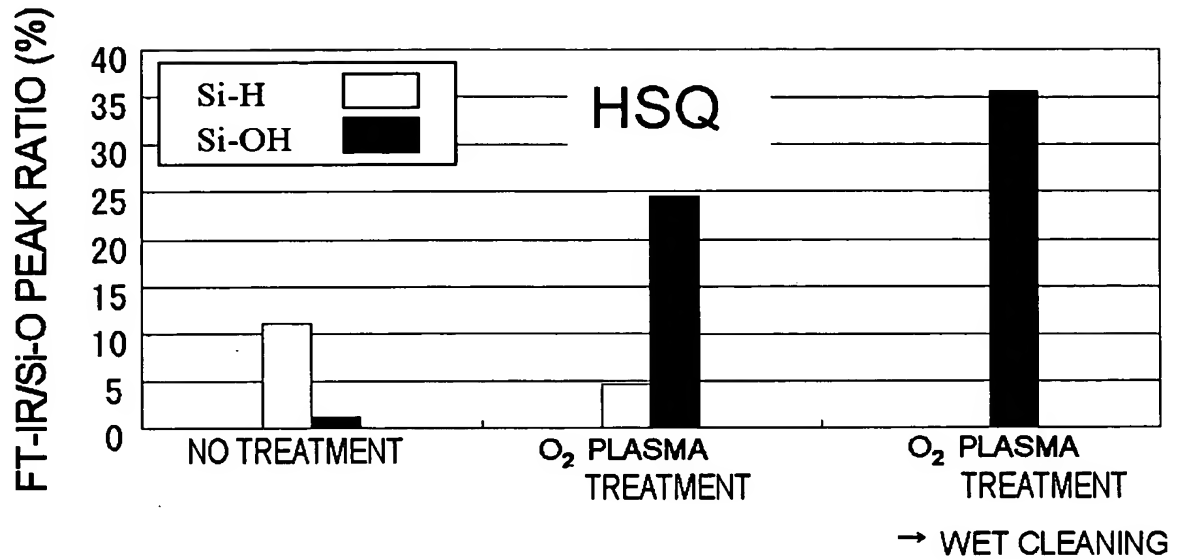


FIG. 3B

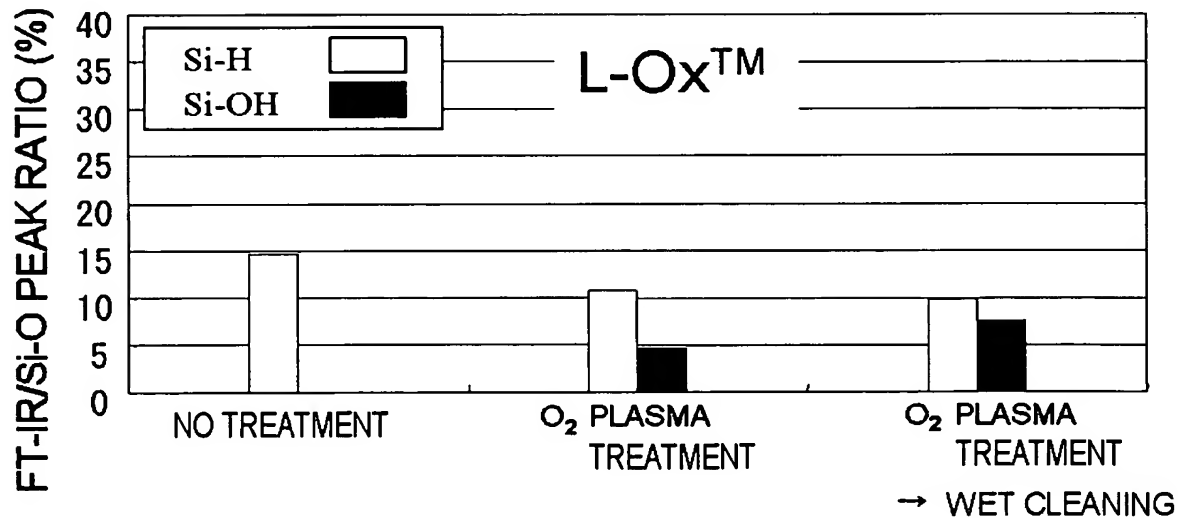


FIG. 4

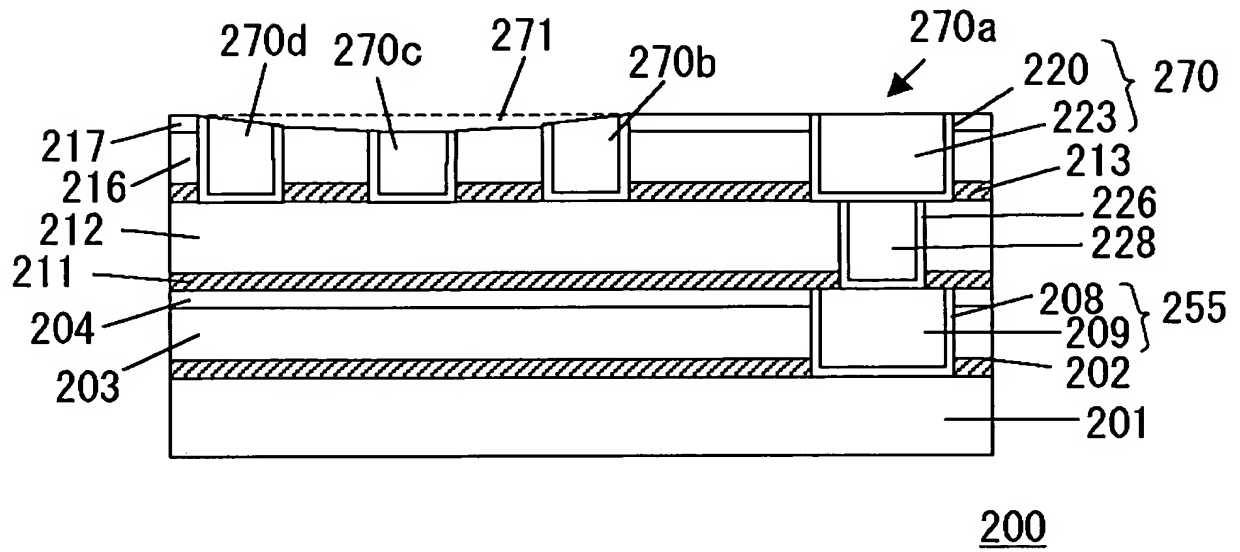


FIG. 5A

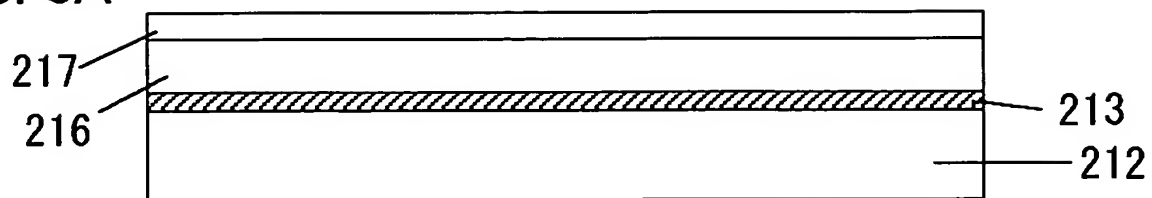


FIG. 5B

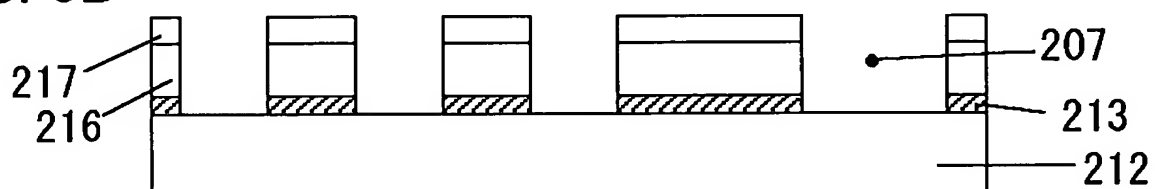


FIG. 5C

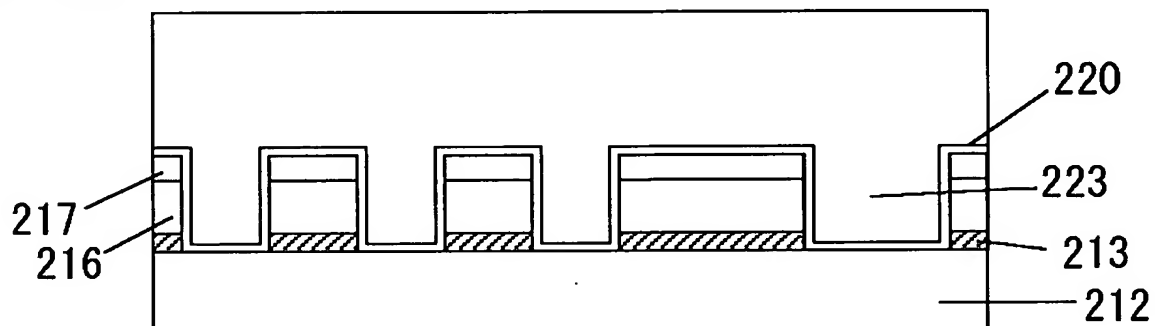


FIG. 5D

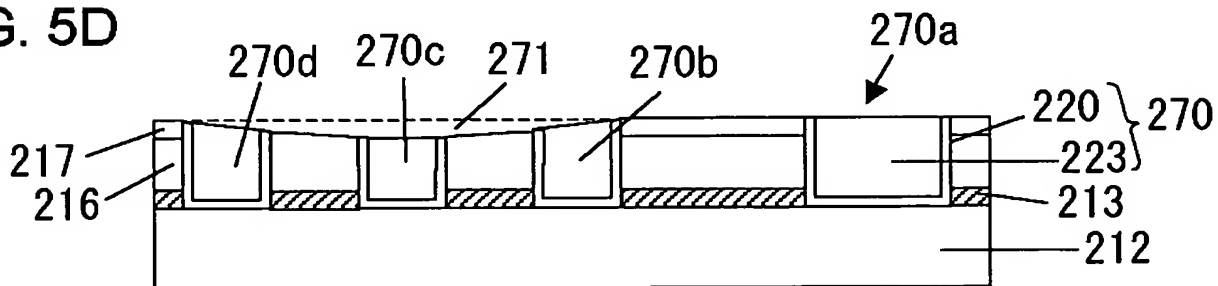


FIG. 6

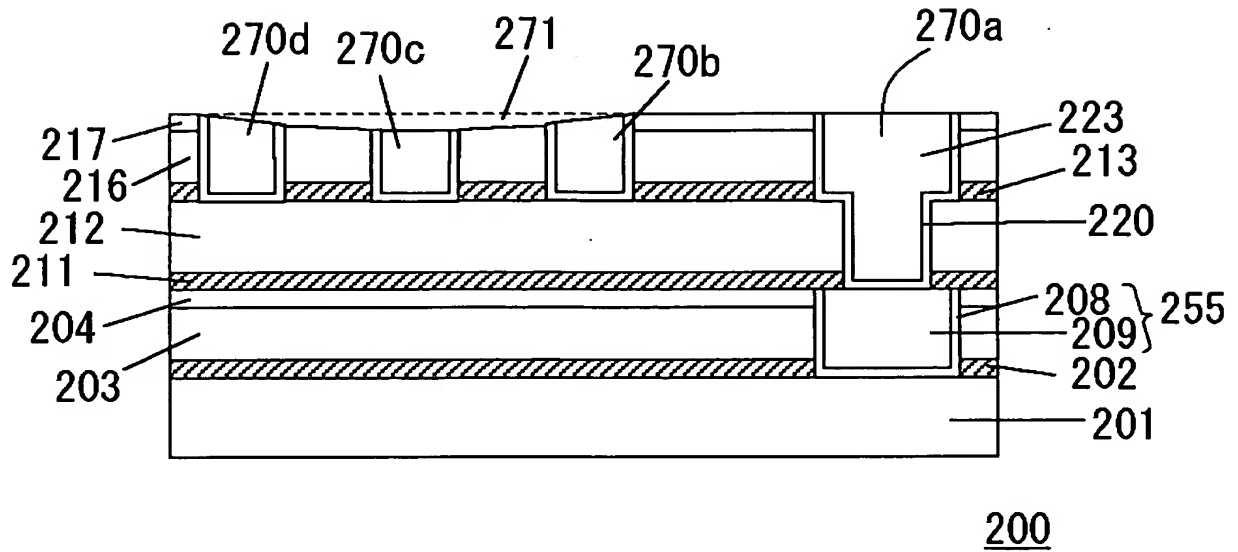


FIG. 7A

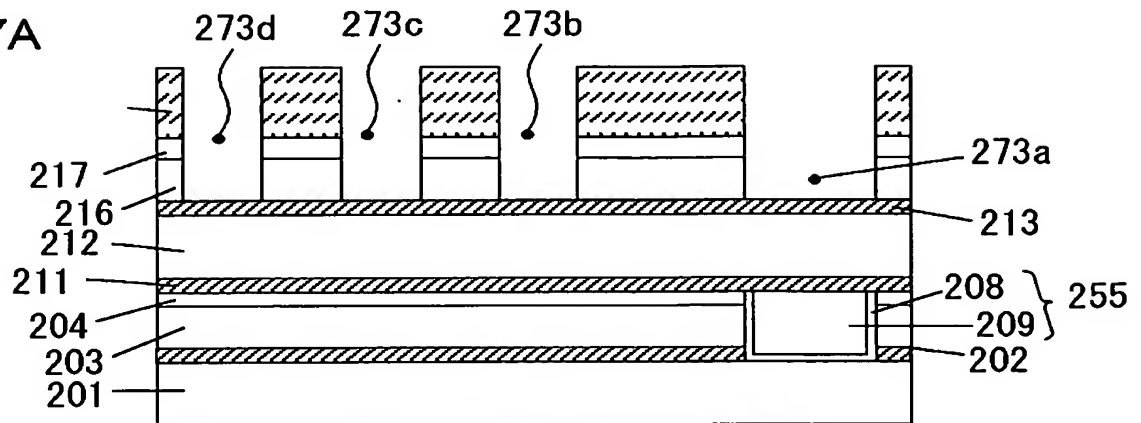


FIG. 7B

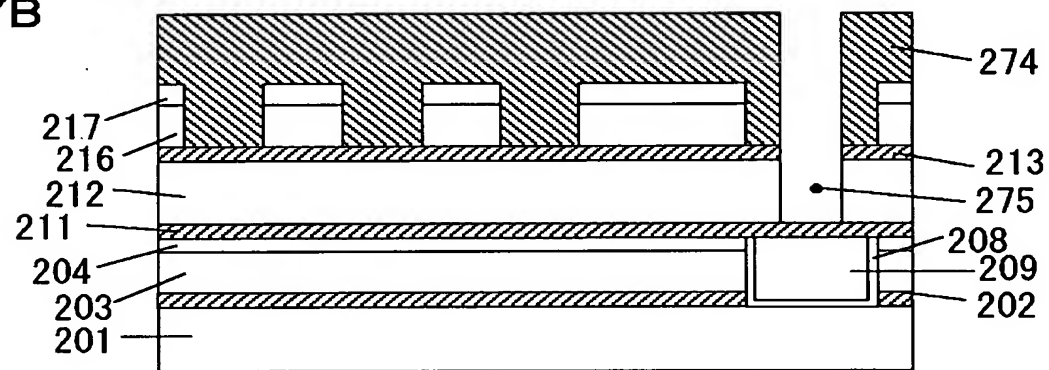


FIG. 7C

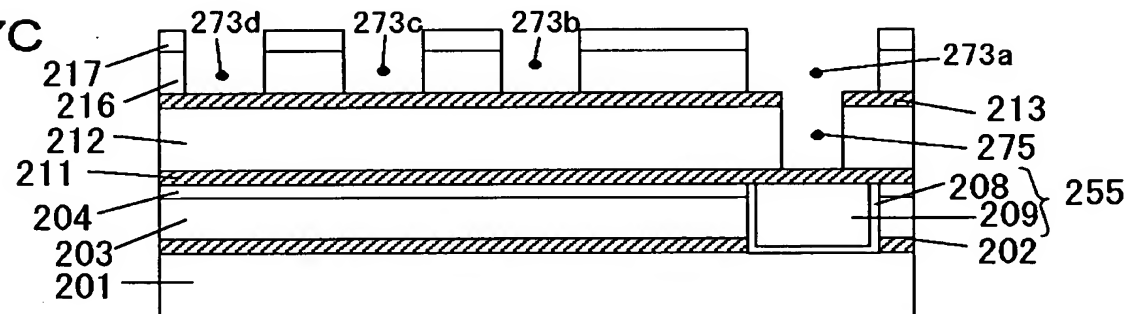


FIG. 7D

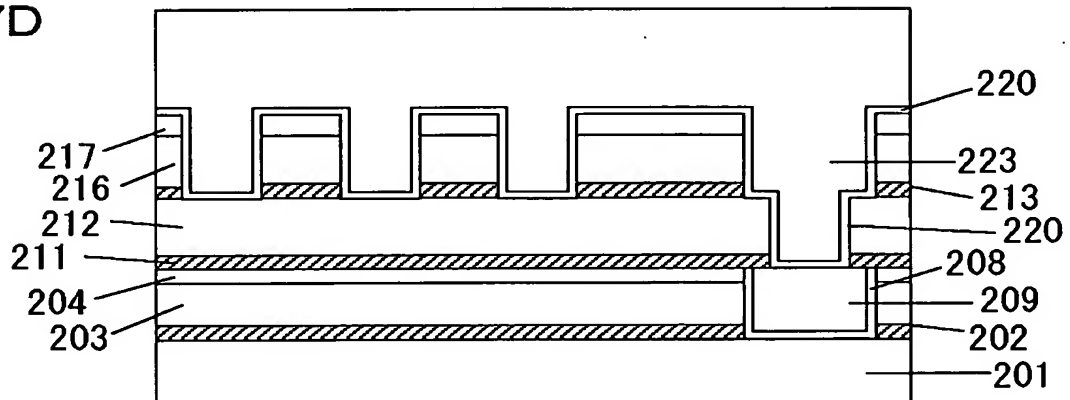


FIG. 8A

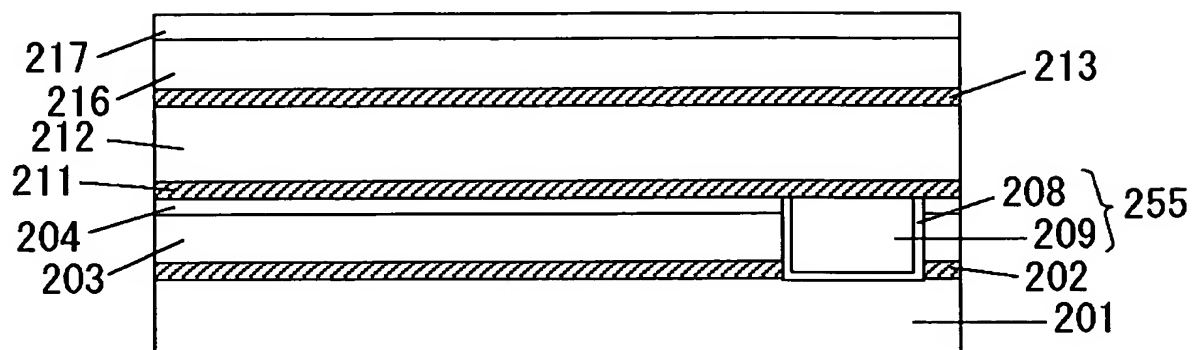


FIG. 8B

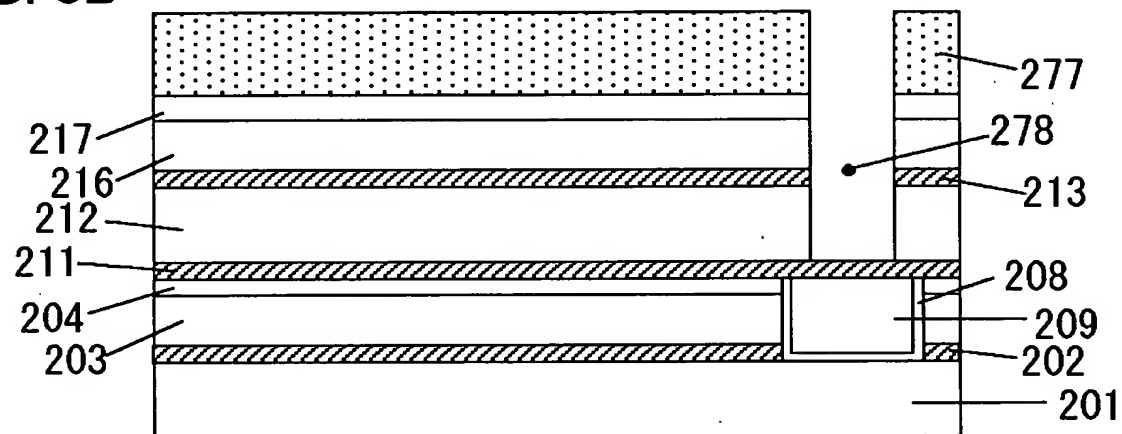


FIG. 8C

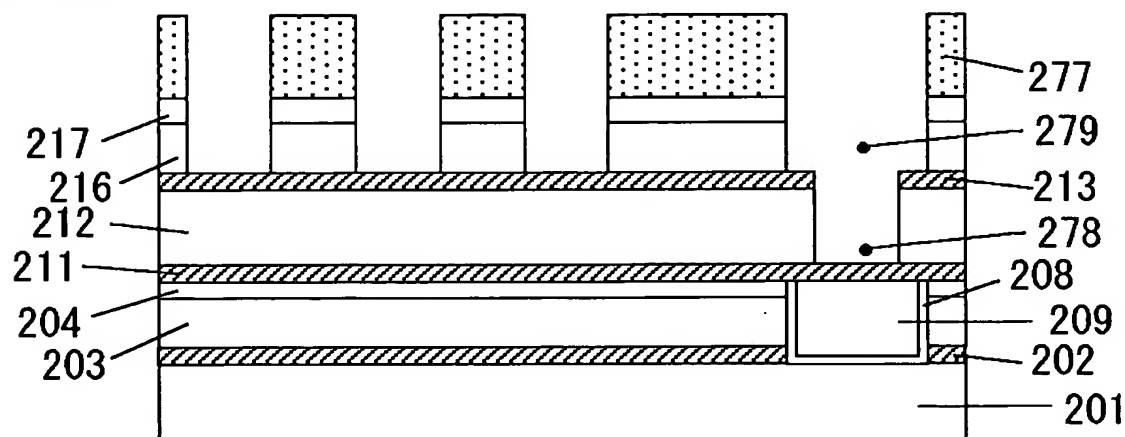


FIG. 9A

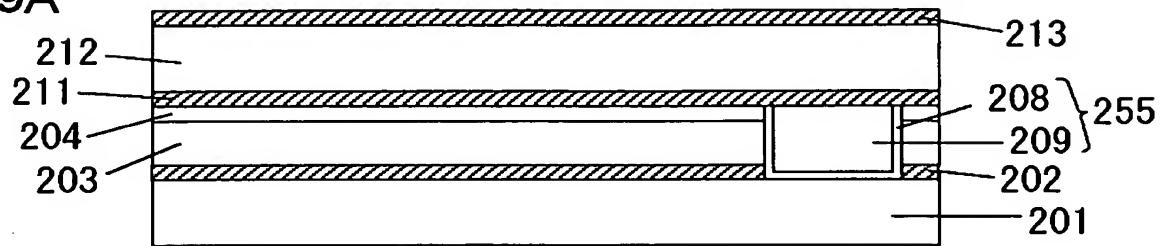


FIG. 9B

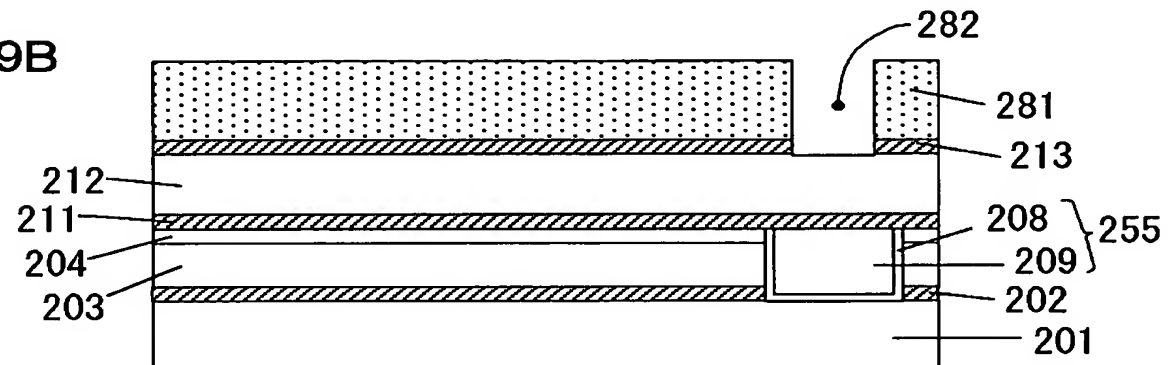


FIG. 9C

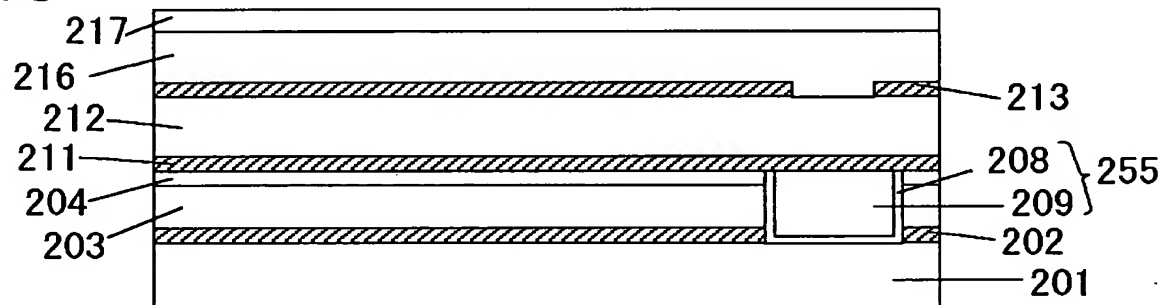


FIG. 9D

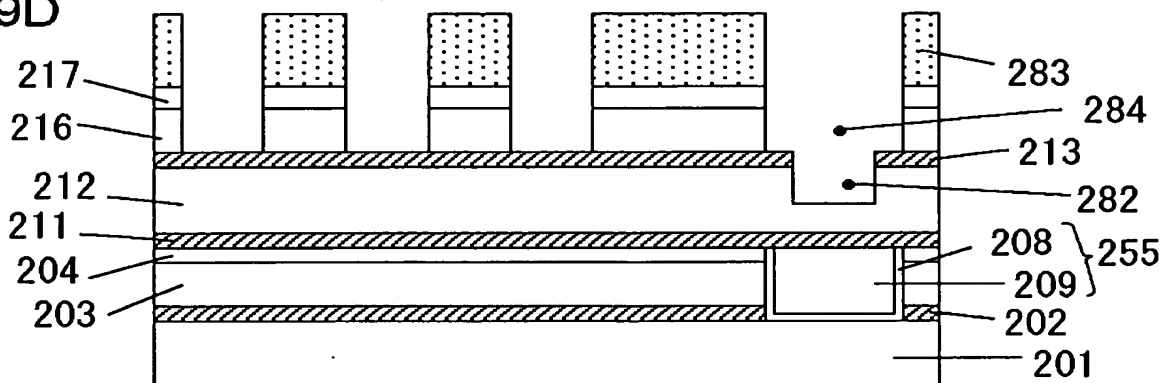


FIG. 10

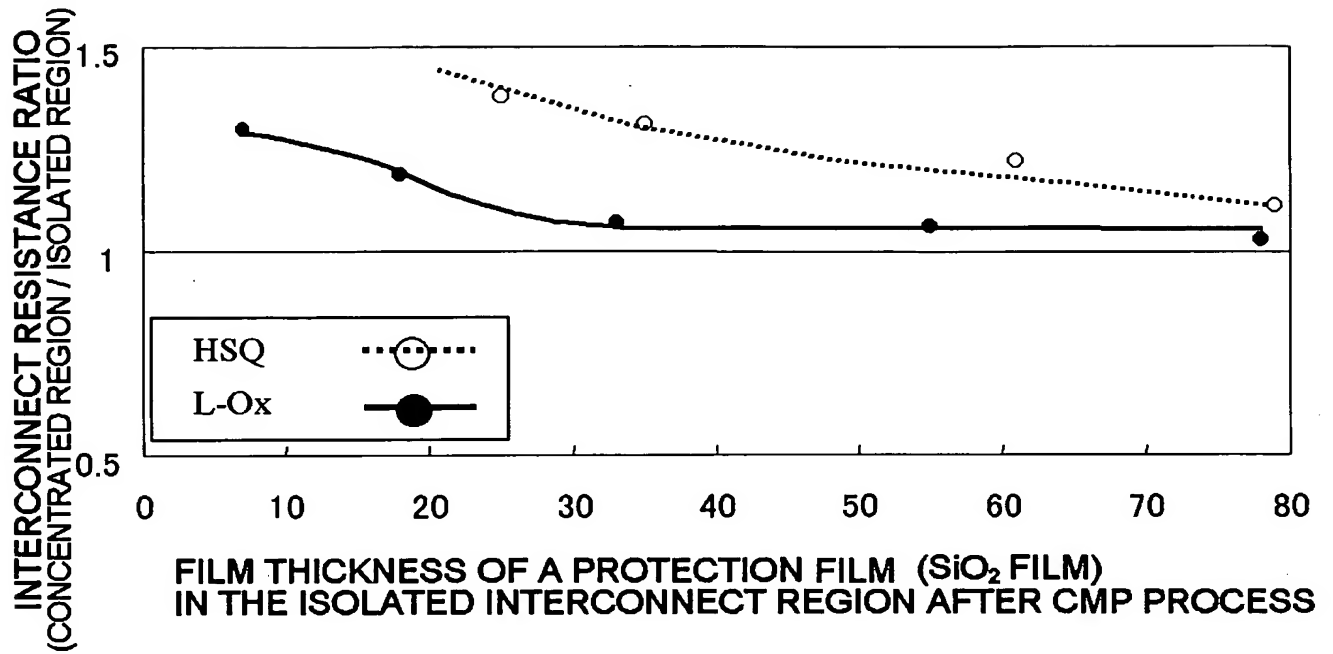


FIG. 11

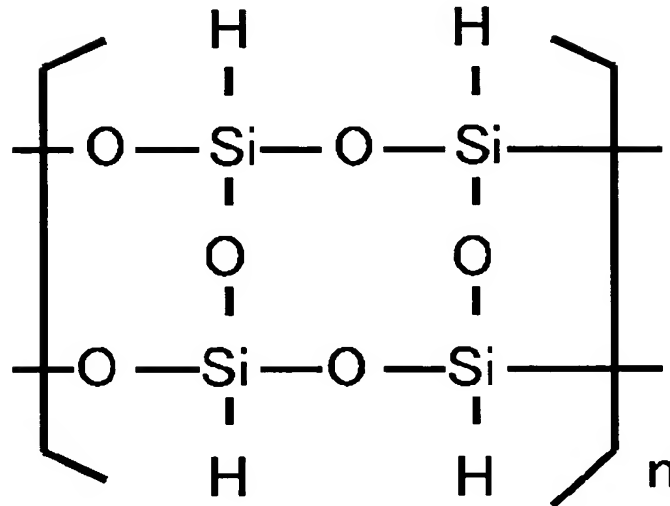


FIG. 12

DIELECTRIC CONSTANT (@1MHz)	2. 9
REFRACTIVE INDEX (@633nm)	1. 39
STRESS (dyne/cm ²)	7. 00E+08
HARDNESS (GPa)	0. 9
ELASTIC MODULUS (GPa)	6
THERMAL EXPANSION COEFFICIENT (ppm/deg-C)	18
GLASS TRANSITION TEMPERATURE (deg-C)	none
THERMAL CONDUCTIVITY (W/m·K @25 deg-C)	0. 31

FIG. 13

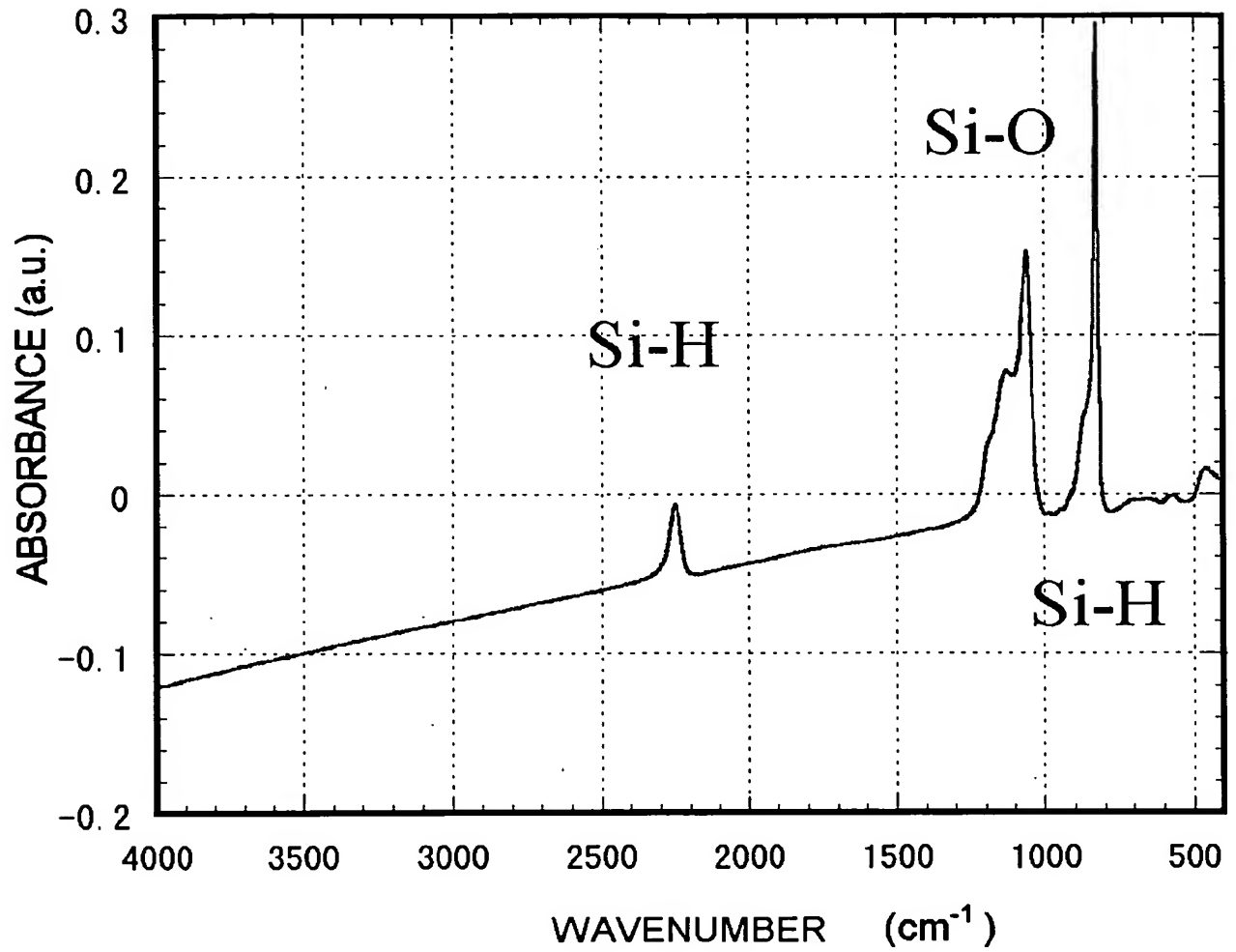


FIG. 14

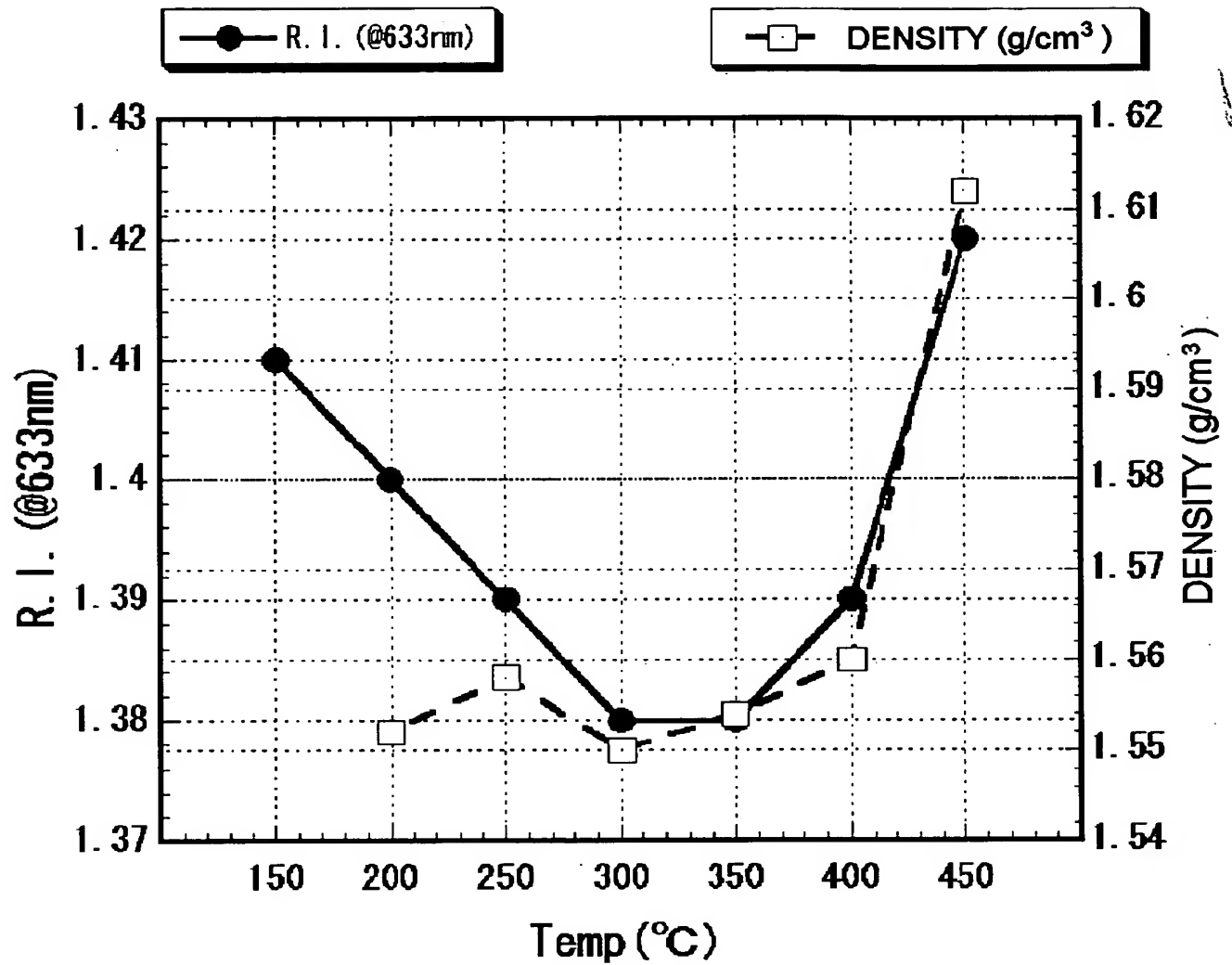


FIG. 15

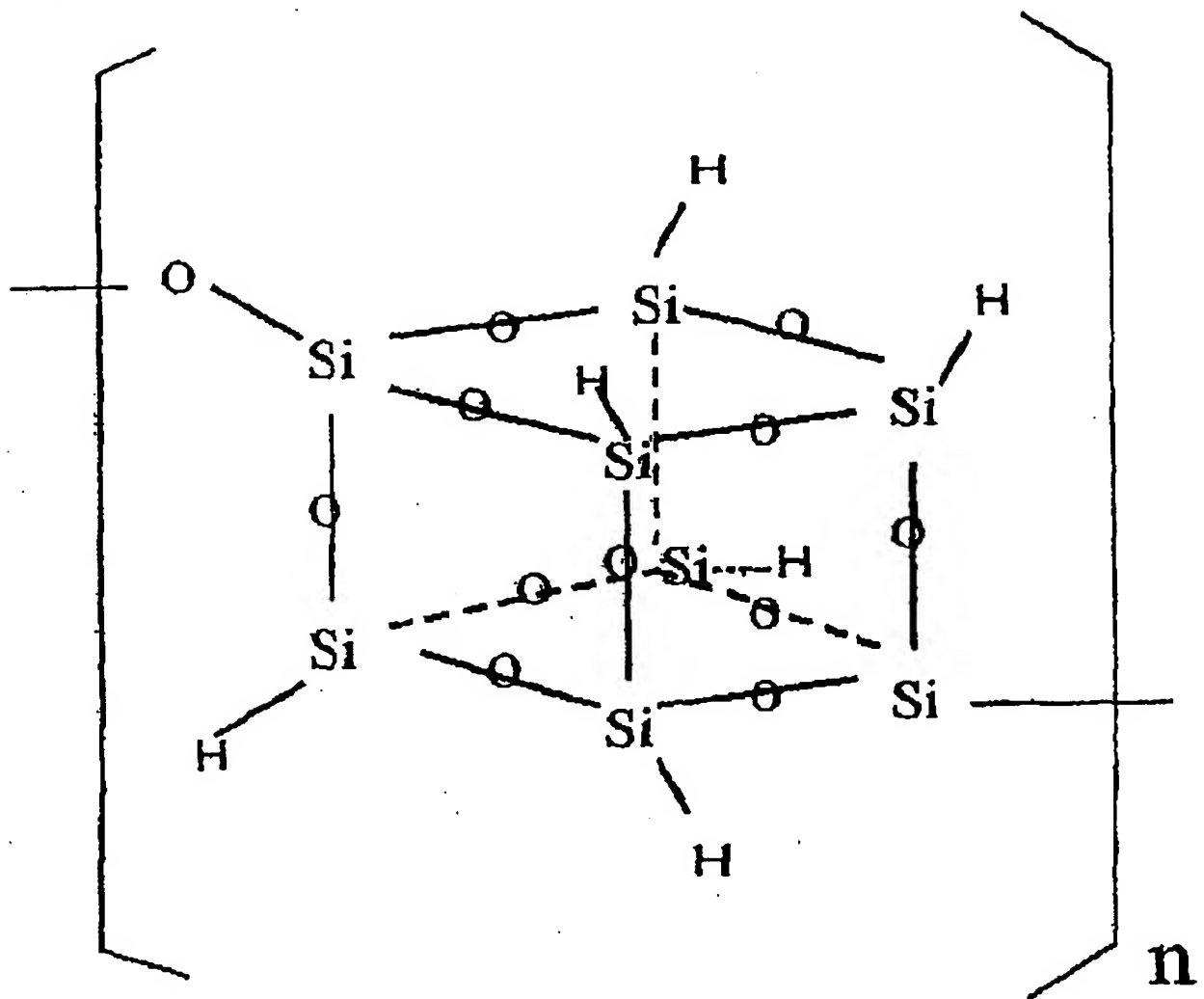


FIG. 16

